## The Silent Progression of Kidney Infections and Stone Formation By Dale G. Alexander, LMT, MA, PhD

There is a strong possibility that the chronic or semi-acute somatic complaints of your clients may have a deeper origin than biomechanical strain. In fact, their somatic difficulties may be associated with the progressing development of kidney stones or infections.

Kidney stones (also called nephrolithiasis or urolithiasis) affect about **12 percent of men and 5 percent of women** by the time they are 70 years old.<sup>1</sup> **Another reference** states: "One in seven men and one in 15 women will be diagnosed with kidney stones during their lifetime. On a typical day, more than 1,300 of them will end up in emergency rooms." In a calendar year that potentially means 474,500 people will seek emergency medical help for their kidney stones.

According to Jean-Pierre Barral, the developer of <u>Visceral Manipulation</u>, kidney dysfunctions are implicated in most lower back and lower extremity chronic somatic complaints, especially those that involve the groin, knees, ankles and feet.<sup>3</sup> The next time a client comes to you complaining of chronic pain in the low back, groin, knee or foot, without a recent direct trauma to these structures, ask them the <u>following questions</u>: Have you or anyone in your family ever had a kidney stone or a kidney infection? Do you have a history of urinary tract or bladder infections? Have you or other members of your family been diagnosed with diabetes? Do you have high blood pressure? Have you recently been experiencing any urinary urgency, high frequency of urination, pain or burning while urinating? Have you noticed a pinkish tinge to your urine?<sup>1</sup>

A positive response to any of these questions, especially the last two, suggests that encouraging your clients to see their physician is in their best interest. Let's appreciate the amazing capacity of the human kidneys. **According to the NIH**: "Every day, a person's kidneys process about 200 quarts of blood to sift out about 2 quarts of waste products and extra water. The wastes and extra water become urine, which flows to the bladder through tubes called ureters. The bladder stores urine until releasing it through urination."<sup>4</sup>

The important question for us as massage therapists is, how many of our present clients are progressing toward developing kidney stones? It has been estimated that it can take **up to 10 years** for kidney stones to form.<sup>5</sup> Consider that low back or lower extremity dysfunction and pain may be the "voice" of one's kidneys; or the hand being raised and waving for attention. Through increased awareness, we may be able to help our clients acknowledge these signals and take appropriate action.

## **Silent Kidney Dysfunction**

According to the <u>Mayo Clinic Web site</u>, "Kidney infection (pyelonephritis) is a specific type of urinary tract infection (UTI) that generally begins in your urethra or bladder and travels up into your kidneys.<sup>6</sup> Another resource suggests that such infections may also result from the encroachment of not only bacteria but also fungi and viruses. The invasion may come from the bloodstream as well as the bladder. Kidney infections seem to occur most often in adult females who are otherwise healthy. Urinary tract infections are <u>uncommon in males until old age</u>, when bladder catheterization and other urinary procedures are more commonly performed.<sup>7</sup>

Similar to the intense pain of renal colic when passing a kidney stone, an acute kidney infection with its attendant fever and chills, abdominal and back pain, urinary urgency and blood in the urine will generally send an individual to the emergency room rather than to your office.

However, chronic kidney infections, which may lead to chronic kidney disease, is reflected in a gradual loss of the kidneys' ability to filter blood, usually due to high blood pressure or diabetes. When kidney function is seriously impaired, dangerous levels of fluid and waste can quickly accumulate. In the early stages of chronic kidney disease, an individual may have few signs or symptoms. Many people with chronic kidney disease **don't realize they have a problem** until their kidney function has decreased to less than 25 percent of normal.2 Obstruction of the flow of urine by stones, an enlarged prostate, strictures (narrowings) or cancers may also **contribute to chronic kidney disease**. Kidney pain is quite tricky because it can radiate to many different parts of the body. The pain may radiate from the organ itself but **often appears as back pain**.

According to John Rothchild, MD, a kidney specialist, "The kidney has **no pain receptors except in the capsule**. Things that provoke kidney pain are in response to its capsule being stretched or in response to its inflammation." This is why kidney diseases are considered "silent." However, this doesn't mean that the degradation of the kidneys' ability to filter our blood doesn't have an effect on physiological homeostasis.

## **Alerting Your Client**

It is my clinical speculation that the origin of kidney-related lower back and lower extremity dysfunctions probably stems from a combination of two factors: venous

and lymphatic congestion as the kidneys filter blood more slowly, and through the neural network of viscero-somatic reflexes within the autonomic nervous system. This is our bodies' evolutionary genius for survival in action. On the downside, this may be how kidney stones and chronic kidney disease may seem to sneak up on us and suddenly emerge. These, among other progressions, rob our clients of their quality of life.<sup>10</sup>

Our opportunity as massage therapists is to alert our clients to the possibility that their chronic somatic complaints may be related to these dysfunctions and encourage them to seek out medical testing to rule out these progressions as possible contributors to their chronic ailments. Encourage clients to ask for blood tests specific to kidney function, and a urinalysis and a urine culture test.

An emerging theory of the Inside-Out Paradigm suggests that when the biomechanical expressions of organ or spinal-cord dysfunction are normalized such that a client's chronic somatic complaints reduce, the body will show a more classic presentation that can be medically recognized. The number of bodywork sessions needed to facilitate the expression of these dysfunctions varies wildly between a few sessions and a number of years, but the theme continues to repeat itself with chronic conditions.

Clients want their answers to be explainable in musculoskeletal terms. One intention of the Inside-Out Paradigm is to bring to our collective awareness the possibilities of progressions that have little or no direct voice. The progressions of kidney stone formation and kidney infections may play a role in your clients' chronic lower back and lower extremity problems. Early detection and prevention is the only way to stay ahead of these "silent" progressions.

I wish to express my gratitude to Jean-Pierre Barral for assisting me to see more clearly how the human body works.

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